

# Tompkins County & Public Library

GASB 45 Other Post-employment  
Benefits Actuarial Valuation for the  
Fiscal Year Ending December 31, 2014

Prepared by:



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February 6, 2015

Mr. Richard C. Snyder  
Director of Finance  
Tompkins County  
125 East Court Street  
Ithaca, New York 14850

Dear Mr. Snyder:

Armory Associates, LLC have been retained by the County of Tompkins for the purpose of determining the obligation and cost in accordance with the Governmental Accounting Standard No. 45 (GASB), **Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions.**

We have examined the assumptions and methods used in determining the liabilities and cost associated with the actuarial valuation of the postretirement benefit plan in accordance with the GASB #45 standard, including but not limited to the following:

- Present Value of Future Benefits (PVFB)
- Actuarial Accrued Liability (AAL)
- Annual Required Contribution (ARC)
- Annual OPEB Cost (AOC)
- Projected Net OPEB Obligation (NOO)
- 20-Year Cash Flow Projections

We relied upon underlying records and/or summaries prepared by the responsible officer or employees of the organization. In other respects, our examination included such review of the assumptions and methods used and such tests of the calculations as we considered necessary.

In our opinion, the amounts carried in the balance sheet on account of the items identified above:

- Are in accordance with accepted actuarial standards consistently applied and are fairly stated in accordance with sound actuarial principles.
- Are based on actuarial assumptions relevant to contract provisions and appropriate to the purpose for which the Statement was prepared.

I, the undersigned, am a Consulting Actuary for Armory Associates, LLC, am a member of the American Academy of Actuaries and meet the Qualification Standards of the Academy to render the actuarial opinion contained herein. To the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principals which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

Respectfully submitted,



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**SECTION 1: EXECUTIVE SUMMARY**

Tompkins County & Public Library provides medical and prescription drug insurance benefits for retirees, spouses, and their covered dependents while contributing a portion of the expenses. Such postemployment benefits are an included value in the exchange of salaries and benefits for employee services rendered. An employee's total compensation package includes not only the salaries and benefits received during active service, but all compensation and benefits received for their services during postemployment. Nevertheless, both types of benefits constitute compensation for employee services.

The summary below identifies the value of postemployment health care benefits for the fiscal year ending December 31, 2014.

**Tompkins County & Public Library  
Postretirement Health Care Benefits Program  
For Fiscal Year Ending December 31, 2014  
Actuarial Accrued Liability and Annual OPEB Cost by Employee Fund**

<b>Actuarial Accrued Liability (AAL)</b>	<b>County</b>	<b>Library</b>	<b>Total</b>
Retirees & Dependents	\$24,522,251	\$1,594,315	\$26,116,566
Actives	63,574,479	3,782,082	67,356,561
Deferred Vesteds	0	0	0
<b>Total Actuarial Accrued Liability</b>	<b>\$88,096,730</b>	<b>\$5,376,397</b>	<b>\$93,473,127</b>
Additional Obligation attributable to future service	60,279,384	3,887,922	64,167,306
<b>Present Value of Total Future Liability</b>	<b>\$148,376,114</b>	<b>\$9,264,319</b>	<b>\$157,640,433</b>

<b>Annual Required Contribution (ARC)</b>			
Normal Cost for Fiscal Year	\$5,079,853	\$311,798	\$5,391,651
Amortization of Unfunded Actuarial Accrued Liability	5,777,985	352,622	6,130,607
<b>Annual Required Contribution (ARC)</b>	<b>\$10,857,838</b>	<b>\$664,420</b>	<b>\$11,522,258</b>

<b>Annual OPEB Cost</b>			
Annual Required Contribution (ARC)	\$10,857,838	\$664,420	\$11,522,258
Interest on Net OPEB Obligation	1,744,814	118,425	1,863,239
Adjustment to Annual Required Contribution	(2,750,885)	(186,710)	(2,937,595)
<b>Annual OPEB Cost</b>	<b>\$9,851,767</b>	<b>\$596,135</b>	<b>\$10,447,902</b>

<b>Net OPEB Obligation</b>			
Net OPEB Obligation - beginning of year	\$43,620,352	\$2,960,626	\$46,580,978
Annual OPEB Cost	9,851,767	596,135	10,447,902
Expected Employer Contributions	(1,102,198)	(86,880)	(1,189,078)
<b>Expected Net OPEB Obligation - end of year</b>	<b>\$52,369,921</b>	<b>\$3,469,881</b>	<b>\$55,839,802</b>

\* These projections are based on the results of the January 01, 2014 valuation using a discount rate of 4%.

## SECTION 2: INTRODUCTION

Armory Associates, LLC is very pleased to be working with the Tompkins County & Public Library. The Tompkins County & Public Library contracted with Armory Associates, LLC to assist in the determination of the present liability for postemployment medical insurance costs for the entire medical plan membership of the Tompkins County & Public Library. This analysis has been completed in accordance with GASB Statement No. 45; Accounting and Financial Reporting by Employers for Postemployment Benefits other than Pensions.

One of the most important foundational concepts to keep in mind throughout this analysis is that postemployment liabilities are being impacted by the fact that people are retiring earlier in life and living longer lives. With the average retirement age being approximately fifty-five (55) years old in the public sector and with people routinely living into their nineties (90's), employers are having to utilize a greater portion of their operating budget each year to account for the extending periods of time in which benefit expenses are incurred.

The motives behind such identification and funding of this liability is threefold:

- It is prudent that your business' annual budget recognizes the future financial obligations and/or liabilities associated with all benefits promised to both employees and retirees;
- Awareness of the expected liabilities prevents future budgets from being overburdened with the financial obligations associated with the cost of retiree benefits; and
- A sufficient system for funding postemployment benefits safeguards retirees in the unlikely event that the employer becomes no longer a viable entity.

The goal of this process is not necessarily to fund the liability today, but rather to accurately identify the liability and establish a plan to effectively and efficiently manage the liability over time. This process will prepare the Tompkins County & Public Library for the financial impact associated with the pressures of providing sufficient postemployment benefits to the employees and retirees.

Armory Associates, LLC will be available to answer all questions regarding this report or any other issues concerning the Tompkins County & Public Library. Should you have any additional questions regarding the information contained herein, please feel free to contact us at our offices by phone at (315) 752-0060.

We would like to thank the Tompkins County & Public Library for this opportunity to serve as your consultant and we look forward to continuing a mutually beneficial relationship for many years to come.

### SECTION 3: COMPARISON TO PREVIOUS FULL VALUATION

Actuarial gains and losses result from differences between the expectations of the prior valuation and the re-measurement of the current valuation. Please keep in mind that future actuarial valuation results may differ significantly from the current measurements presented due to changes in factors such as: demographic gains/losses, assumption changes, trend rate adjustments, accrued plan experience, health care legislation, and benefit plan changes. The following is a summary of the differences and their associated factors between the January 1, 2012 valuation and the current January 1, 2014 valuation:

#### Demographic Changes

- Demographic (gain)/loss comes from many sources, such as rates of termination, retirement, and election of health care benefits. In addition to common sources of demographic changes the County is also no longer considered responsible for providing retirement healthcare benefits to “TC3” retirees. Compared to the full valuation for the fiscal year ending 2012 there are 79 fewer actives (-9.4%) while providing benefits to 41 fewer retirees (-14.6%). The combined changes in demographics effected an approximate 11.2% decrease in accrued liabilities.

#### Plan Provision & Assumption Changes

- No changes were made to the structure of the County’s postemployment health benefit plan which have a substantial impact on current or future retirees’ healthcare benefits.

#### Health Plan & Trend Changes

- Health cost (gain)/loss estimates the effect of actual 2012-2014 health cost trend compared with projections in the January 1, 2012 valuation. Due to a change in the health plan provided, actual health plan claims costs for this valuation are significantly lower than the previous valuation. Additionally, for post-2013 trends, we updated the long-term healthcare trend model to the most recent Society of Actuaries (SOA) Long-Run Medical Cost Trend Model. The net effect of the changes to plan options, plan costs, and trend rates was a decrease in accrued liabilities of approximately 4.3%.

#### Changes Due to Implementation of Affordable Care Act

- As part of the Patient Protection & Affordable Care Act (PPACA), the addition of an excise tax in 2018 on health plans that exceed predetermined thresholds will cause an increase in the County’s liability. The net effect of implementing the excise tax was projected to result in an increase to accrued liabilities of approximately 17.4%. More information regarding this excise tax and other aspects of the PPACA can be found in Sections 6 and 8 of this report.

## Comparison Summary

This exhibit compares the results from the previous January 1, 2012 valuation with the results of the current January 1, 2014 valuation. The January 1, 2012 AAL and Normal Cost are rolled-forward in time with interest and reduced by benefits expected to have been received in order to reconcile the expected January 1, 2014 AAL with the actual January 1, 2014 AAL:

<b>Expected January 1, 2014 Actuarial Accrued Liability (AAL)</b>	
January 1, 2013 Actuarial Accrued Liability (roll-forward of Jan. 1, 2012 AAL)	88,389,400
January 1, 2013 Normal Cost	4,835,986
Interest Cost on above (4%)	3,729,015
2013 Expected Employer Contributions	(1,385,107)
<b>Expected January 1, 2014 Actuarial Accrued Liability</b>	<b>95,569,294</b>

<b>Reconciled (Gain)/Loss of Plan Changes</b>	
Impact of Changes to Trend, Premiums, and Claims	(4,184,528)
Impact of Cadillac Tax	13,857,137
Impact of Changes to Plan Provisions	0
Demographics (Gain)/Loss	(11,768,776)
<b>Plan Changes (Gain)/Loss</b>	<b>(2,096,167)</b>

<b>Actual January 1, 2014 Actuarial Accrued Liability</b>	
Expected January 1, 2014 Actuarial Accrued Liability	95,569,294
Plan Changes (Gain)/Loss	(2,096,167)
<b>Actual January 1, 2014 Actuarial Accrued Liability</b>	<b>93,473,127</b>

**SECTION 4: 20-YEAR PAYOUT PROJECTION**

The table below is a 20-year pay-as-you-go cash flow projection for the OPEB plan and does not include the cost of benefits for currently employed members. The projections are broken down into current retiree cost projections and future retiree cost projections.

**20-Year Pay-As-You-Go Projection**

<b>Fiscal Year Ending</b>	<b>Total</b>
2014	\$1,189,077
2015	\$1,357,796
2016	\$1,553,037
2017	\$1,745,425
2018	\$1,981,459
2019	\$2,235,074
2020	\$2,521,944
2021	\$2,861,190
2022	\$3,180,829
2023	\$3,528,548
2024	\$3,933,097
2025	\$4,284,395
2026	\$4,639,465
2027	\$5,069,793
2028	\$5,505,115
2029	\$5,956,832
2030	\$6,419,315
2031	\$6,932,233
2032	\$7,428,324
2033	\$7,930,601

**SECTION 5: DEMOGRAPHIC INFORMATION**

The following tables summarize active and retiree demographic information.

Age Group	Active Service Report									Total
	Years of Service									
	0-4	5-9	10-14	15-19	20-25	26-30	31-35	36-40	40+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	13	0	0	0	0	0	0	0	0	13
25-29	21	9	1	0	0	0	0	0	0	31
30-34	38	19	2	0	0	0	0	0	0	59
35-39	21	28	14	1	0	0	0	0	0	64
40-44	24	34	31	11	6	0	0	0	0	106
45-49	20	18	23	15	18	10	1	0	0	105
50-54	10	20	13	23	21	26	6	1	0	120
55-59	12	18	18	21	18	11	11	4	1	114
60-64	9	13	11	22	19	14	5	5	1	99
65-69	6	6	9	4	7	5	2	0	2	41
70-74	1	1	1	1	0	0	0	0	0	4
75-79	0	0	1	1	2	0	0	0	0	4
80-84	1	0	0	0	0	0	0	0	0	1
85+	0	0	0	0	0	0	0	0	0	0
Total	176	166	124	99	91	66	25	10	4	761

Actives Not Fully Eligible:	524
Actives Fully Eligible:	237

Actives Average Age:	48.7
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Age Group	Retiree Count
0-19	0
20-24	0
25-29	0
30-34	0
35-39	0
40-44	0
45-49	2
50-54	3
55-59	15
60-64	42
65-69	66
70-74	33
75-79	24
80-84	21
85+	33
<b>Total</b>	<b>239</b>

**SECTION 6: METHODS AND ASSUMPTIONS**

<b>Actuarial Cost Method</b>	Projected Unit Credit
<b>Plan Type</b>	Single Employer Defined Benefit Plan
<b>Discount Rate</b>	4%
<b>Mortality - Actives</b>	The RP-2000 Mortality Table for employees, sex distinct, with generational mortality using scale AA.
<b>Mortality – Retirees</b>	The RP-2000 Mortality Table for Health Annuitants, sex distinct, with generational mortality using scale AA.
<b>Turnover</b>	Rates of decrement due to turnover based on the experience under the New York State & Local Retirement System as prepared by the Department of Civil Service’s actuarial consultant in the report titled, <u>Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation</u> . Please refer to Exhibits 6-1 & 6-2 for the complete turnover tables.
<b>Retirement Incidence</b>	Rates of decrement due to retirement based on the experience under the New York State & Local Retirement System as prepared by the Department of Civil Service’s actuarial consultant in the report titled, <u>Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation</u> . Please refer to Exhibits 6-3, 6-4, & 6-5 for the complete retirement incidence tables.

**Medical Trend**

To Fiscal Year Ending	Medical/Rx Blended Trend Rates
2015	5.00%
2016	6.00%
2017	6.10%
2018	6.07%
2019	6.03%
2024	5.89%
2029	6.05%
2034	5.90%
2044	5.20%
2054	4.97%
2064	4.83%
2074	4.73%
2084	4.29%

The above trend rates were developed using the baseline projection of the SOA Long-Run Medical Cost Trend Model. The short term (first 4 years) trend rates were based on the recent premium rate history for the Tompkins County & Public Library. The long-term (after 4 years) trend rates were based on the following assumptions:

Rate of Inflation: 2.9%

Rate of Growth in Real Income / GDP per capita: 1.7%

Income Multiplier for Health Spending: 1.40

Extra Trend due to Technology and other factors: 1.2%

Health Share of GDP Resistance Point: 25%

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical US medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group. The above schedule represents a reasonable medical trend projection for the current plan provisions and demographics of the County Retiree Welfare Benefits Plan, and no changes to these baseline assumptions are necessary.

**Election Percentage**

Upon retirement it is assumed that eligible employees will elect for post-retirement health care benefits at the following rates

Participant Group	% Electing Coverage
Retiree	100%
Retiree's Spouse	50%
Surviving Spouse	10%

**Marriage Rate**

It is assumed that 70% of retirees will be married at the time of their retirement, with the male spouse assumed to be approximately 3 years older than the female.

**Morbidity**

To reflect the differences in covered health care expenses due to aging, the expected health care claims are assumed to increase relative to the participant's age as follows:

Age	Annual Increase
45-49	3.00%
50-54	3.30%
55-59	3.60%
60-64	4.20%
65-69	3.00%
70-74	2.50%
75-79	2.00%
80-84	1.00%
85-89	0.50%
90+	0.00%

The aforementioned age related morbidity rates are based on results from Table 4 of "Aging Curves for Health Care Costs in Retirement," by Jeffrey Petertil, published in the **North American Actuarial Journal**, July 2005.

**Per Capita Costs**

The Retiree Health Care Plans are experience-rated plans that are available to all actives and retirees. The following table presents per capita costs of the plans, including administrative fees, which were used to calculate the actuarial accrued liability:

Age	Tompkins County Traditional Plan (Main/Non-Road)	Tompkins County Traditional Plan (Road Patrol)	Tompkins County Blue PPO OptionH
45-49	\$6,581	\$6,590	\$6,215
50-54	\$7,619	\$7,630	\$7,195
55-59	\$8,952	\$8,965	\$8,455
60-64	\$10,742	\$10,757	\$10,145
65-69	\$6,328	\$6,337	\$5,976
70-74	\$7,211	\$7,222	\$6,810
75-79	\$8,036	\$8,048	\$7,590
80-84	\$8,669	\$8,682	\$8,187
85-89	\$9,007	\$9,020	\$8,506
90+	\$9,138	\$9,151	\$8,630

**Amortization Period**

The period used to determine amortization costs for the initial Unfunded Actuarial Accrued Liability is a level period of thirty (30) years. The remaining amortization period used for this valuation is twenty-four 24 years.

**Amortization Method**

Level dollar closed.

**Patient Protection and Affordable Health Care Act (PPACA) Assumptions****Threshold Increase**

It was assumed that there would be no initial increase to the 2018 threshold amounts. The following are the 2018 thresholds:

Coverage	2018 Threshold	Amount Added to Thresholds for ages 55-64
Individual	\$10,200	\$1,650
Family & All Other Tiers	\$27,500	\$3,450

**Threshold Trend**

After 2018 the cost thresholds are indexed by CPI (CPI +1% in 2019 only). A CPI of 3% was used for this valuation.

**Cost Attribution**

It was assumed that the plan administrator would pass additional excess costs to the plan sponsors via increased premium rates.

**Assumed Gross-Up Tax Rate**

No gross-up tax rate was used in this valuation.

**Retiree Contributions**

It was assumed for this valuation that the County would pass on costs related to the excise tax onto retirees at the average contribution rate for retirees.

**Additional Requirements**

For purposes of this valuation, the following aspects of the PPACA have been incorporated into the underlying premium costs:

- Extended coverage for children
- 100% coverage of preventive care.

The following aspects of the PPACA result in no additional employer liability:

- Elimination of lifetime maximum benefits.
- Removal of the limits on essential healthcare.

**Exhibit 6-1: NYSERS Turnover Table**

Age	Years of Service					
	<2	2-2.99	3-3.99	4-4.99	5-9.99	>=10
15	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
16	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
17	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
18	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
19	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
20	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
21	16.960%	10.868%	8.421%	7.517%	7.088%	3.252%
22	16.851%	11.972%	8.817%	7.528%	7.088%	3.252%
23	16.765%	12.601%	9.098%	7.547%	7.049%	3.252%
24	16.656%	12.930%	9.262%	7.575%	6.965%	3.252%
25	16.510%	13.088%	9.330%	7.614%	6.826%	3.252%
26	16.323%	13.127%	9.334%	7.672%	6.636%	3.252%
27	16.087%	13.048%	9.303%	7.763%	6.407%	3.252%
28	15.798%	12.840%	9.249%	7.888%	6.167%	3.220%
29	15.457%	12.503%	9.172%	8.025%	5.950%	3.175%
30	15.074%	12.067%	9.056%	8.130%	5.776%	3.113%
31	14.666%	11.577%	8.879%	8.147%	5.654%	3.036%
32	14.252%	11.085%	8.626%	8.030%	5.572%	2.949%
33	13.849%	10.624%	8.293%	7.762%	5.514%	2.860%
34	13.471%	10.207%	7.898%	7.367%	5.457%	2.774%
35	13.128%	9.823%	7.479%	6.909%	5.382%	2.692%
36	12.820%	9.452%	7.084%	6.466%	5.270%	2.609%
37	12.548%	9.081%	6.752%	6.108%	5.107%	2.517%
38	12.312%	8.710%	6.506%	5.870%	4.896%	2.414%
39	12.110%	8.356%	6.340%	5.741%	4.653%	2.306%
40	11.937%	8.036%	6.227%	5.675%	4.406%	2.198%
41	11.790%	7.770%	6.130%	5.620%	4.183%	2.098%
42	11.663%	7.568%	6.023%	5.534%	4.004%	2.010%
43	11.552%	7.430%	5.892%	5.401%	3.878%	1.935%
44	11.451%	7.344%	5.740%	5.231%	3.796%	1.869%
45	11.360%	7.289%	5.583%	5.050%	3.741%	1.805%
46	11.282%	7.244%	5.440%	4.884%	3.695%	1.732%
47	11.220%	7.190%	5.329%	4.757%	3.647%	1.644%
48	11.181%	7.118%	5.260%	4.680%	3.591%	1.547%
49	11.162%	7.030%	5.231%	4.646%	3.531%	1.448%
50	11.155%	6.936%	5.231%	4.640%	3.473%	1.360%
51	11.145%	6.851%	5.246%	4.639%	3.421%	1.291%
52	11.113%	6.793%	5.263%	4.622%	3.382%	1.243%
53	11.046%	6.774%	5.275%	4.575%	3.355%	1.214%
54	10.943%	6.794%	5.286%	4.501%	3.336%	1.197%
55	10.819%	6.852%	5.307%	4.418%	3.326%	1.188%
56	10.710%	6.940%	5.366%	4.358%	3.322%	1.185%
57	10.660%	7.056%	5.490%	4.358%	3.322%	1.187%
58	10.712%	7.200%	5.706%	4.450%	3.327%	1.193%
59	10.897%	7.379%	6.035%	4.650%	3.334%	1.201%
60	11.210%	7.596%	6.476%	4.961%	3.343%	1.211%
61	11.605%	7.841%	7.008%	5.358%	3.354%	1.221%
62	11.985%	8.087%	7.578%	5.798%	3.363%	1.229%
63	12.209%	8.284%	8.101%	6.211%	3.372%	1.236%
64	12.209%	8.284%	8.101%	6.211%	3.377%	1.240%
65	12.209%	8.284%	8.101%	6.211%	3.378%	1.241%
66	12.209%	8.284%	8.101%	6.211%	3.378%	1.241%
67	12.209%	8.284%	8.101%	6.211%	3.378%	1.241%
68	12.209%	8.284%	8.101%	6.211%	3.378%	1.241%
69	12.209%	8.284%	8.101%	6.211%	3.378%	1.241%
70	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

**Exhibit 6-2: NYSERS (Police) Turnover Table**

Years of Service	Turnover Rates
0	7.955%
1	5.009%
2	3.084%
3	2.050%
4	1.555%
5	1.295%
6	1.135%
7	1.047%
8	0.987%
9	0.875%
10	0.726%
11	0.590%
12	0.509%
13	0.451%
14	0.386%
15	0.327%
16	0.268%
17	0.223%
18	0.223%
19	0.223%
20	0.223%
21	0.223%
22	0.223%
23	0.223%
24	0.223%
25	0.223%
26	0.223%
27	0.223%
28	0.223%
29	0.223%
30	0.223%
31	0.223%
32	0.223%
33	0.223%
34	0.223%
35	0.223%
36	0.223%
37	0.223%
38	0.223%
39	0.223%

**Exhibit 6-3: NYSERS Retirement Incidence Table**

Age	Years of Service		
	< 20	20-29.99	>= 30
55	5.368%	8.827%	28.216%
56	4.518%	7.174%	20.938%
57	4.626%	7.307%	18.393%
58	4.870%	8.150%	21.279%
59	5.683%	9.622%	24.370%
60	6.412%	11.768%	23.707%
61	11.522%	20.838%	32.988%
62	20.910%	39.194%	43.710%
63	14.090%	25.830%	31.095%
64	14.543%	23.372%	24.977%
65	19.902%	31.101%	27.759%
66	15.511%	24.229%	22.960%
67	14.727%	21.717%	21.737%
68	14.148%	21.250%	20.472%
69	15.790%	21.035%	21.862%
70	100.000%	100.000%	100.000%

**Exhibit 6-4: NYSERS (Police)  
Retirement Incidence Table**

Years of Service	Retirement Rates
20	7.322%
21	7.073%
22	8.349%
23	5.671%
24	5.058%
25	8.781%
26	8.084%
27	10.850%
28	13.515%
29	15.451%
30+	18.469%

**Exhibit 6-5: NYSERS (Correction Officer)  
Retirement Incidence Table**

Years of Service	Retirement Rates
25	26.648%
26	14.923%
27	15.678%
28	17.105%
29	18.182%
30	18.182%
31	18.182%
32	18.311%
33	20.188%
34	22.684%
35	26.046%
36	30.229%
37	35.173%
38	40.668%
39	46.662%
40	100.000%

**SECTION 7: PLAN PROVISIONS**

**Health Plans:** Tompkins County provides experience rated healthcare coverage to its retirees through Excellus BCBS in the form of traditional indemnity and PPO plans. The following is a summary of the plans provided to retirees:

Post-Employment Medical Plan Summaries					
Service	BCBS Traditional Plan			Blue PPO OptionH Plan	
				In-Network	Out-of-Network
OV Copay	None			\$10	None
Deductible	\$100 Individual \$200 Family			\$0	\$250 Individual \$750 Family
Coinsurance	None			\$10 Copayment	80% Coinsurance after deductible has been met for all services
Inpatient Services	Covered in Full			Covered in Full	Subject to deductible and coinsurance.
Outpatient Services	Covered in Full			Covered in full except Surgical Care and Diagnostic Imaging subject to Copay.	Subject to deductible and coinsurance.
Out of Pocket Maximums	\$750 Aggregate Family Max			\$0 Individual \$0 Family	\$1,000 Individual \$3,000 Family
Lifetime Maximums	\$1,000,000			Unlimited	\$2,000,000
<b>Prescription Drugs (30 &amp; 90 day supplies)</b>	<b>Trad</b>	<b>Road</b>	<b>Corr.</b>		
	\$5	\$5	\$5	\$5	\$5
	\$10	\$15	\$15	\$10	\$10
	\$25	\$30	\$25	\$25	\$25

**Premium Rates:** Since the premium rates effective January 1, 2015 were made available at the time of the valuation they were used as the basis for trending future premium rates beginning in the 2015 fiscal year. The following are the monthly premium rates for health insurance effective January 1, 2014 and January 1, 2015 respectively.

2014 Retiree Monthly Plan Premium Rates			
	Traditional (County)	Traditional (Road)	Blue PPO OptionH
<b>Individual</b>	\$807.44	\$808.59	\$743.04
<b>Family</b>	\$1,749.95	\$1,751.81	\$1,608.75

2015 Retiree Monthly Plan Premium Rates			
	Traditional (County)	Traditional (Road)	Blue PPO OptionH
<b>Individual</b>	\$847.81	\$849.01	\$780.19
<b>Family</b>	\$1,837.45	\$1,839.40	\$1,689.19

**Retiree Eligibility & Contribution Requirements**

All active employees and retirees are subject to the following eligibility and contribution requirements:

**Sheriff & Police Department**

*Actives:* 41

*Retirees:* 22

**Retirement System:** New York State Employees Retirement System (NYSERS).

**Eligibility:** Eligibility for postretirement benefits requires a minimum of 20 years of service with the County.

**Contributions**

**Retiree:** Retirees are required to contribute 50% of the individual premium amount.

**Spouse:** Participating spouses of retirees are required contribute 65% of the individual premium amount.

**Surviving Spouse:** Surviving spouses may continue coverage by contributing 100% of the individual premium amount.

**Medicare Part B Reimbursement:** The County provides full Medicare Part B premium reimbursement to all Medicare eligible retirees and spouses.

**Corrections Department**

*Actives:* 41

*Retirees:* 6

**Retirement System:** New York State Employees' Retirement System (NYSERS).

**Eligibility:** Eligibility for postretirement benefits requires a minimum of 25 years of service with the County.

**Contributions**

**Retiree:** Retirees are required to contribute 50% of the individual premium amount.

**Spouse:** Participating spouses of retirees are required contribute 65% of the individual premium amount.

**Surviving Spouse:** Surviving spouses may continue coverage by contributing 100% of the individual premium amount.

**Medicare Part B Reimbursement:** The County provides full Medicare Part B premium reimbursement to all Medicare eligible retirees and spouses.

**Tompkins County Public Library**

*Actives:* 48

*Retirees:* 16

**Retirement System:** New York State Employees' Retirement System (NYSERS).

**Eligibility:** Eligibility for postretirement benefits requires a minimum age of 55 years of service with the County and retirement eligibility with the NYSERS.

**Contributions**

**Retiree:** Retirees are required to contribute 50% of the individual premium amount.

**Spouse:** Participating spouses of retirees are required contribute 65% of the individual premium amount.

**Surviving Spouse:** Surviving spouses may continue coverage by contributing 100% of the individual premium amount.

**Medicare Part B Reimbursement:** The County provides full Medicare Part B premium reimbursement to all Medicare eligible retirees and spouses.

**All Non-Sheriff/Corrections/Library Employee Groups**

*Actives:* 631

*Retirees:* 195

**Retirement System:** New York State Employees' Retirement System (NYSERS).

**Eligibility:** Eligibility for postretirement benefits requires a minimum age of 55 years of service with the County and retirement eligibility with the NYSERS.

**Contributions**

**Retiree:** Retirees are required to contribute 50% of the individual premium amount.

**Spouse:** Participating spouses of retirees are required contribute 65% of the individual premium amount.

**Surviving Spouse:** Surviving spouses may continue coverage by contributing 100% of the individual premium amount.

**Medicare Part B Reimbursement:** The County provides full Medicare Part B premium reimbursement to all Medicare eligible retirees and spouses.

## SECTION 8: HEALTH CARE REFORM INFORMATION

### Excise “Cadillac” Tax

Beginning in 2018, the Patient Protection and Affordable Care Act (PPACA) imposes a non-deductible excise tax of 40% on plans exceeding specified dollar thresholds. The excise tax only applies to the portion of the premium that exceeds the thresholds. The 2018 thresholds are as follows:

Coverage	2018 Threshold	Amount Added to Thresholds for ages 55-64
Individual	\$10,200	\$1,650
Family & All Other Tiers	\$27,500	\$3,450

Thresholds change over time and can be different for each employer

- Thresholds are indexed at general inflation (CPI-U) with an additional 1% trend from 2018 to 2019. CPI-U of 3% was used for this valuation.
- Multi-employer plans can use ‘All Other Tier Coverage’ thresholds for all members.
- The 2018 thresholds are adjusted upwards if Federal Employees Health Benefit Plan (FEHBP) Blue Cross/Blue Shield Standard Benefit rates in 2018 are more than 55% higher than 2010 rates. Since 2012 rates were available at the time of this valuation, we trended these rates to 2018 using our healthcare trend table and compared this trended rate to the FEHBP 2010 rate. We found the trended 2018 rate to be approximately 54.9% higher than the 2010 FEHBP rate and therefor applied no increase to the 2018 thresholds.
- Thresholds can be adjusted upwards if the age/gender characteristics of all employees of that employer would result in a higher cost relative to the national workforce. For example, this may apply to employers with higher than usual populations of police/fire employees; however regulations do not specify whether a different demographic adjustment can be determined for each employer subgroup.
- Regulations do not address retiree-only plans.

### Excise Tax Attribution

- The excise tax is paid by the plan administrator and is not tax deductible.
- A gross-up factor is also applied to any additional taxable income generated by the administrator by passing costs to plan sponsors.
- No gross-up costs are assumed for this valuation as the plan is self-insured.
- It is assumed that the administrator will pass additional costs to the plan sponsor in the form of higher premium rates.

## SECTION 9: GASB OPEB SUMMARY

The Governmental Accounting Standards Board (GASB) issued Statement No. 45 for the recognition and disclosure of municipal employers' (Counties, Cities, Towns, Villages, School Districts, etc.) postemployment benefit plans other than pensions. Postemployment benefits include health care benefits, life insurance benefits, dental insurance benefits, and in some cases unused sick day credits. These benefits arise from an exchange of salaries and benefits for employee services rendered and constitute part of the compensation for those services.

Every Municipal employer will be required to conduct an actuarial analysis and provide a financial disclosure relative to the accrued liabilities of the postemployment benefit plans and the funded status of those liabilities. It is important to note that Statement No. 45 does not require the funding of this liability.

### Implementation Dates

#### *Phase 1:*

- Employers with annual revenues which exceed \$100,000,000
- Fiscal years beginning after December 15, 2006

#### *Phase 2:*

- Employers with annual revenues which exceed \$10,000,000, but whose revenues are less than \$100,000,000.00
- Fiscal years beginning after December 15, 2007

#### *Phase 3:*

- Employers with annual revenues which are less than \$10,000,000
- Fiscal years beginning after December 15, 2008

### Valuation Frequency

For financial reporting purposes, a full actuarial valuation should be performed at the following minimum frequency:

- a) Biennially for plans with a total membership of 200 or more
- b) Triennially for plans with a total membership of fewer than 200

## GASB 45 Terminology

**Actuarial Present Value of Total Projected Benefits:** Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested in addition to investment earnings will provide sufficient assets to pay total projected benefits when due.

**Actuarial Accrued Liability (AAL):** The AAL is the portion, as determined by a particular Actuarial Cost Method, of the actuarial present value of the total future benefits based on the employees' service rendered to the measurement date.

**Annual Required Contributions (ARC):** The employer's periodic required contributions to a defined benefit OPEB Plan, calculated in accordance with the parameters.

**Annual OPEB Cost:** An accrual-base measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

**Net OPEB Obligation:** The cumulative difference since the effective date of this Statement annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (assets) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

**Unfunded Actuarial Accrued Liability (UAAL):** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. For an unfunded plan the UAAL is equal to the AAL.

**SECTION 10: YEAR-END DISCLOSURE ACCOUNTING INFORMATION**

**Tompkins County & Public Library - Total**  
**Year-End Disclosures under GASB #45**  
**For the Post-retirement Health Care Benefits Program**

<b>Required Information</b>	<b>FY 2014</b>	<b>FY 2013</b>	<b>FY 2012</b>
Annual required contribution	\$11,522,258	\$10,687,404	\$9,931,906
Interest on net OPEB obligation	1,863,239	1,523,989	1,196,899
Adjustment to annual required contribution	<u>(2,937,595)</u>	<u>(2,345,037)</u>	<u>(1,800,164)</u>
Annual OPEB cost (expense)	10,447,902	9,866,356	9,328,641
Contributions made (expected)	<u>(1,189,078)</u>	<u>(1,385,107)</u>	<u>(1,151,380)</u>
Increase in net OPEB obligation	9,258,824	8,481,249	8,177,261
Net OPEB obligation - beginning of year	<u>46,580,978</u>	<u>38,099,729</u>	<u>29,922,468</u>
Net OPEB obligation - end of year	<u><u>\$55,839,802</u></u>	<u><u>\$46,580,978</u></u>	<u><u>\$38,099,729</u></u>
Annual OPEB Cost	10,447,902	9,866,356	9,328,641
Percentage of Annual OPEB Cost Contributed	11.4%	14.0%	12.3%
Net OPEB Obligation at end of year	55,839,802	46,580,978	38,099,729
<b>Required Supplementary Information</b>			
Actuarial Value of Assets	0	0	0
Actuarial Accrued Liability (AAL)	93,473,127	88,389,400	81,446,917
Unfunded AAL	93,473,127	88,389,400	81,446,917
Funded Ratio	0%	0%	0%
Covered Payroll	36,248,428	37,675,873	N/A
UAAL as a Percentage of Covered Payroll	258%	235%	N/A
Discount rate at end of year	4.00%	4.00%	4.00%
Expected Return on plan assets	N/A	N/A	N/A
Rate of compensation increase	N/A	N/A	N/A

**Tompkins County & Public Library - County**  
**Year-End Disclosures under GASB #45**  
**For the Post-retirement Health Care Benefits Program**

<b>Required Information</b>	<b>FY 2014</b>	<b>FY 2013</b>	<b>FY 2012</b>
Annual required contribution	\$10,857,838	\$10,024,589	\$9,316,540
Interest on net OPEB obligation	1,744,814	1,426,621	1,120,140
Adjustment to annual required contribution	(2,750,885)	(2,195,211)	(1,684,717)
Annual OPEB cost (expense)	9,851,767	9,255,999	8,751,963
Contributions made (expected)	(1,102,198)	(1,301,165)	(1,089,938)
Increase in net OPEB obligation	8,749,569	7,954,834	7,662,025
Net OPEB obligation - beginning of year	43,620,352	35,665,518	28,003,493
Net OPEB obligation - end of year	<u>\$52,369,921</u>	<u>\$43,620,352</u>	<u>\$35,665,518</u>
Annual OPEB Cost	9,851,767	9,255,999	8,751,963
Percentage of Annual OPEB Cost Contributed	11.2%	14.1%	12.5%
Net OPEB Obligation at end of year	52,369,921	43,620,352	35,665,518
<b>Required Supplementary Information</b>			
Actuarial Value of Assets	0	0	0
Actuarial Accrued Liability (AAL)	88,096,730	82,905,337	76,402,949
Unfunded AAL	88,096,730	82,905,337	76,402,949
Funded Ratio	0%	0%	0%
Covered Payroll	N/A	N/A	N/A
UAAL as a Percentage of Covered Payroll	N/A	N/A	N/A
Discount rate at end of year	4.00%	4.00%	4.00%
Expected Return on plan assets	N/A	N/A	N/A
Rate of compensation increase	N/A	N/A	N/A

**Tompkins County & Public Library - Library**  
**Year-End Disclosures under GASB #45**  
**For the Post-retirement Health Care Benefits Program**

<b>Required Information</b>	<b>FY 2014</b>	<b>FY 2013</b>	<b>FY 2012</b>
Annual required contribution	\$664,420	\$662,815	\$615,366
Interest on net OPEB obligation	118,425	97,368	76,759
Adjustment to annual required contribution	(186,710)	(149,826)	(115,447)
Annual OPEB cost (expense)	596,135	610,357	576,678
Contributions made (expected)	(86,880)	(83,942)	(61,442)
Increase in net OPEB obligation	509,255	526,415	515,236
Net OPEB obligation - beginning of year	2,960,626	2,434,211	1,918,975
Net OPEB obligation - end of year	<u>\$3,469,881</u>	<u>\$2,960,626</u>	<u>\$2,434,211</u>
Annual OPEB Cost	596,135	610,357	576,678
Percentage of Annual OPEB Cost Contributed	14.6%	13.8%	10.7%
Net OPEB Obligation at end of year	3,469,881	2,960,626	2,434,211
<b>Required Supplementary Information</b>			
Actuarial Value of Assets	0	0	0
Actuarial Accrued Liability (AAL)	5,376,397	5,484,063	5,043,968
Unfunded AAL	5,376,397	5,484,063	5,043,968
Funded Ratio	0%	0%	0%
Covered Payroll*	N/A	N/A	N/A
UAAL as a Percentage of Covered Payroll*	N/A	N/A	N/A
Discount rate at end of year	4.00%	4.00%	4.00%
Expected Return on plan assets	N/A	N/A	N/A
Rate of compensation increase	N/A	N/A	N/A

**SECTION 11: DETAILS OF CALCULATIONS**

<b>Calculation of Normal Cost</b>	
Normal Cost	5,184,280
Interest on Normal cost	207,371
<b>Normal cost component</b>	<b>5,391,651</b>

<b>Calculation of Amortization Component</b>	
Actuarial Accrued Liability (AAL)	93,473,127
Actuarial Value of Assets	0
Unfunded Actuarial Accrued Liability (UAAL)	93,473,127
Amortization Method	Level Dollar
Amortization Period (years)	24.00
Discount Rate	4.00%
Amortization Factor	15.86
Annual Amortization	5,894,814
Interest on Amortization Payment	235,793
<b>Amortization Component</b>	<b>6,130,607</b>

<b>Calculation of Annual Required Contribution (ARC)</b>	
Normal Cost Component	5,391,651
Amortization Component	6,130,607
<b>Annual Required Contribution (ARC)</b>	<b>11,522,258</b>

<b>Calculation of Interest on Net OPEB Obligation</b>	
Net OPEB Obligation at end of Prior Year	46,580,978
Discount rate	4.00%
<b>Interest on Net OPEB Obligation</b>	<b>1,863,239</b>

<b>Calculation of Annual OPEB Cost</b>	
Annual Required Contribution (ARC)	11,522,258
Interest on Net OPEB Obligation	1,863,239
Adjustment to annual required contribution	(2,937,595)
<b>Annual OPEB cost (expense)</b>	<b>10,447,902</b>

<b>Calculation of Net OPEB Obligation</b>	
Net OPEB obligation at 01/01/2014	46,580,978
Annual OPEB cost (expense)	10,447,902
Expected Employer Contributions made during year	(1,189,077)
<b>Net OPEB obligation at 12/31/2014</b>	<b>55,839,803</b>

Fiscal Year Ended	12/31/2012	12/31/2013	12/31/2014
Prior Year's Net OPEB Obligation	28,003,493	38,099,729	46,580,978
Annual OPEB cost (expense)	9,328,641	9,866,356	10,447,902
Employer Contributions made during year	(1,151,380)	(1,385,107)	(1,189,077)
Net OPEB Obligation	38,099,729	46,580,978	55,839,803

**SECTION 12: SUPPLEMENTAL SCHEDULE SS-2 - OPEB****Annual OPEB Cost and Net OPEB Obligation**

■ Type of Other Post Employment Benefit Plan (OPEB):	Agent Multi Employer Defined Benefit Plan
■ Annual Required Contribution:	\$11,522,258
■ Interest on Net OPEB Obligation:	\$1,863,239
■ Adjustment to Annual Required Contribution:	\$(2,937,595)
■ Annual OPEB Expense:	\$10,447,902
■ Less: Actual (Expected) Contribution Made:	\$(1,189,077)
■ Increase in Net OPEB Obligation:	\$9,258,825
■ Net OPEB Obligation – beginning of year:	\$46,580,978
■ Net OPEB Obligation – end of year:	\$55,839,803
■ Percentage of Annual OPEB Cost Contributed:	11.4%

**Funded Status and Funding Process**

■ Actuarial Accrued Liability (AAL):	\$93,473,127
■ Less: Actuarial Value of Plan Assets:	\$0
■ Unfunded Actuarial Accrued Liability:	\$93,473,127
■ Funded Ratio (Actuarial Value of Plan Assets/AAL):	0%
■ Annual Covered Payroll:	\$36,248,428
■ UAAL as Percentage of Annual Covered Payroll:	258%

**Other OPEB Information**

■ Date of Most Recent Actuarial Valuation (mm/dd/yyyy):	01/01/2014
■ Actuarial Method Used:	Projected Unit Credit
■ Assumed Rate of Return on Investments Discount Rate:	4.00%
■ Amortization Period of UAAL (in years):	24.00